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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,443	03/30/2004	Hirofumi Harada	S004-5253	3384
7590	10/31/2005		EXAMINER	
ADAMS & WILKS				TOLEDO, FERNANDO L
31st Floor 50 Broadway New York, NY 10004				ART UNIT PAPER NUMBER
				2823

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/812,443	HARADA, HIROFUMI
	Examiner	Art Unit
	Fernando L. Toledo	2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 September 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) 2-7 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 30 March 2004 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 3 April 2003. It is noted, however, that applicant has not filed a certified copy of the 2003-099926 application as required by 35 U.S.C. 119(b).

Election/Restrictions

2. Applicant's election without traverse of Species I in the reply filed on 23 September 2005 is acknowledged.

3. Claims 2 – 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 September 2005.

Drawings

4. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Ninomiya (U. S. Patent 6,639,275 B1).

7. In re claim 1, Ninomiya, in the U. S. Patent 6,639,275 B2; figures 1A – 8B discloses, carrying out an anisotropic etching (Figure 3B) for a region in which a trench is intended to be formed on a main surface of a semiconductor substrate of a first conductivity type to form the trench 13; forming a gate oxide film 14 over the main surface of the semiconductor substrate of the first conductivity type and along wall surface of the trench; depositing a polycrystalline silicon wafer 15 so as to overlie the gate oxide film; etching the polycrystalline silicon layer so as to remove the polycrystalline silicon layer overlying the main surface of the semiconductor substrate and so as to remove the polycrystalline layer within the trench to a predetermined depth from the main surface of the semiconductor substrate to form a gate electrode within the trench; implanting an impurity of a second conductivity type 16 into the main surface of the semiconductor substrate of the first conductivity type and thermally diffusing the impurity of the second conductivity type to form a body region of the second conductivity type; implanting an impurity of the first conductivity type into the main surface of the semiconductor substrate to form a source region 17 of the first conductivity type; implanting an impurity of the second conductivity type 16a into the main surface of the semiconductor substrate to form a body contact region of the second conductivity type; depositing an intermediate insulating film 20

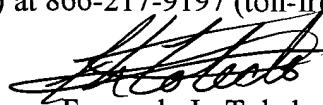
over the main surface of the semiconductor substrate and the gate electrode; etching back the intermediate insulating film overlaying the main surface of the semiconductor substrate so as to entirely expose the source region and the body contact region constituting the main surface of the semiconductor substrate (Figure 6B); and forming a source metal electrode 18 over the main surface of the semiconductor substrate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fernando L. Toledo whose telephone number is 571-272-1867. The examiner can normally be reached on Mon-Thu 7am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fernando L. Toledo
Patent Examiner
Art Unit 2823